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AMERICAN DYESTUFF REPORTER

Vol. IV, No. 11

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AMERICAN DYESTUFF REPORTER

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PRYING INTO PRICES

Deadlock Between Consumers, Who Are Waiting for "Something to Drop," and Dye Brethren, Who Say They'll Continue to Wait, Results in Business Stagnation

LETHARGIC encephalitis is the imposing term employed by a voluble medical profession to designate the new "sleeping sickness" which is at present engaging the preventive efforts of various municipal health departments. Following upon the heels of the "flu," this malady, although by no means so dangerous to human life, has already resulted in several fatalities in England and this country. The inability to fight off an increasing drowsiness ten hours after the disease has been contracted, with ensuing coma from which the patient sometimes never awakens, are its salient characteristics. The physicians say it is infectious. It may, then, originate from the one and only American dye industry.

Certain it is that the industry was bitten by a micro-organism of some such description a month or two ago. And if the human indisposition is anything like as "catching" as that which has infected the dye trade, vaccinations should be in order before long.

But herein lies another difficulty. The germ, or "bug," which is responsible for the introduction of *encephalitis lethargica* into our innards has not been isolated, and consequently no specific vaccine for its destruction can be made. The big research foundations like the Rockefeller Institute are already hard at work, but there is no telling what the outcome will be. Fortunately the trade bacillus is not so difficult of recognition; yet its corresponding anti-toxin, Time, is, after all, the only sure agent for its eradication. It is to be fervently hoped that too long an application will not, in the present case, be necessary, otherwise unforeseen hardships will beset the dye industry and its development to the point dreamed of in 1914 considerably retarded.

The consumers of dyestuffs are not buying, at present, any more than just enough to keep going with. Business, for the dye manufacturers, is dead slow and confined to a few small sales and dreams of better days to come. The lethargy in which the trade seems steeped has endured for more than two months, and whether it is on the increase or on the decrease would be extremely difficult to say at the moment of writing. Opinions in the trade seem to be about equally divided between these two possibilities, with per-

haps a rather pessimistic view of things enveloping the whole, and a general inclination to indulge in the worst possible interpretation of the outlook. But there; we are talking now like a market report!

Labor troubles, when all is said and done, seem to be the chief cause for the stagnation. These have bred a feeling of uncertainty; the mills are not taking any chances on buying dyestuffs at the prevailing prices while they face the prospect of shut-downs. It is evident that they still cling to the hope that another month or two will see the figures of to-day considerably reduced, and naturally they object to stocking up with dyes which they feel certain can be purchased cheaper after the present unrest has vanished. Likewise, this business lethargy has spread and taken hold all along the line, and many mills to-day are facing the prospect of idleness simply because they cannot get orders. The jobbers, who also look for lower prices, will not buy of the mill agents, and so it goes merrily 'round the circle—and nobody is very happy.

Coupled with this, however, is a feeling of resentment against the dye industry in general which has no business to exist. That ephemeral but necessary element of trade known as goodwill is widely lacking in the case of the dye manufacturer. Its importance as a factor in the stimulation of business is not always paramount, but in the present case it is playing a role of unwarranted proportions. A mill agent recently commented on this phase of the situation by saying that his mills felt that the dye manufacturers were indulging in profiteering at the expense of the textile industries. "They tell us," said he, "that they are obliged to charge such high prices because of the heavy investments for plant and equipment necessary to begin the manufacture of dyes in commercial quantities in this country. Well, we're willing to agree that great investments were necessary, but it is my belief that most of them recovered the cost of their plant and equipment—yes, and of research also—after the first year of operation. I am not a dye manufacturer, but I don't see why such high prices should continue. You can't make me believe it's wholly imperative. It looks as though they were trying to take advantage of a good thing.

"It may be that I don't know what I'm talking about," he went on, "but even supposing they hadn't recovered their money until the end of the second year—what then? Are their overhead charges and raw materials still so high that there can be practically no change for the better? And while on the subject of raw materials, what's all this talk about great quantities of intermediates released by the Government for the use of private enterprise? That ought to make a difference, it seems to me. Anyway, we have no intention of buying any more now than we have to. Business is slow enough, and it would be foolish to buy dyes now which we can probably get later for maybe a third less."

It really looks like a deadlock. Both sides are playing a waiting game. In justice to the dye industry, it must be stated that the situation in that quarter is not quite as the mill man saw it. In the first place, dye prices will not come down radically until some of the present quantities on hand, made at greater expense than those to-day, have been disposed of. These adjustments take time, and the textile people will do well to bear in mind that the dye manufacturers are not so blind as to incur hostility by charging fancy prices for their products without some good reason for it. From the standpoint of material assistance and good will, the manufacturer has had many favors shown him; from the standpoint of moral backing and that indefinable

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commercial atmosphere which crystallizes in the form of kindly words and good-natured tolerance he has also had his share, but of late days this factor has swung the other way, so that he now gets the worst of it in a majority of cases.

The textile interests must likewise bear in mind that in undertaking to do in four years what the Germans spent forty in accomplishing, much money was wasted in the erection of plant which afterward had to be abandoned. This was due to the fact that the American manufacturers tackled a proposition which is normally expected to require years of research and many experimental buildings. They took enormous risks and, being human, did not feel quite safe until they began to see a balance on the right side of the ledger. Another factor which contributed to the high prices charged was the fly-by-night, wildcat "manufacturer" who, perhaps, left his job as janitor somewhere, rented a ramshackle barn, and started business with all the *savoir faire* of a Schwab or a Guggenheim acquiring a million-dollar plant. This individual, drawn by the lure of the chemical market quotations, began producing a few pounds of dyestuffs which the Germans had been selling for fifteen to twenty cents. He sold them in terms of dollars, which he was enabled to do by the great need existing and the willingness of the consumers to pay unheard-of prices in order to keep going at all. But inasmuch as the Germans' ability to sell at such a low figure depended almost wholly upon the fact that they made dyes in enormous quantities, and as our friend was producing only infinitesimal quantities, the answer is apparent that it would not take much of a slump in prices to drive him out of business simply because he could never hope to manufacture any cheaper without the capital to start large-scale operations. Another and only too well-known cause of much hard feeling was, of course, the dye "gyp" of unsavory memory. This type is now practically out of existence, and few of the other remain. For such as still linger, the death-knell has been sounded. Finally, it must be remembered that much of the capital wrung by "extortion" from the hapless consumer has, in the case of legitimate dye-manufacturing enterprises, gone straight back to into the business with a view to building it up to a still greater point of efficiency and permanency, and that there still remain some dyes manufactured under less favorable conditions on which brokers and manufacturers now holding them are unwilling to take a loss, if it can be avoided, and which must be disposed of before the situation can be eased up.

Both sides, then, are engaged in trying to "out-sit" the other fellow. It may be in the end that the dye manufacturers will have to take some losses; from present indications it would seem not improbable, but it is unlikely that

(*Continued on page* 9.)

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FOREIGN REFUSAL OF IMPORT LICENSES

The letter reprinted below was received by the British branch of a large American dyestuff manufacturing company from the British Board of Trade in response to their request for permission to bring into England certain German dyestuffs which had been purchased before the war but which are now lying in Holland awaiting disposition. The interesting part of the letter is not so much the refusal of the Board of Trade to consider the importation of goods of enemy origin as the second paragraph, which states that it is now proposed to prohibit the importation of *all* dyestuffs into England for a period or ten years after conclusion of peace.

The letter in question follows:

Board of Trade, London.

February 6, 1919.

Gentlemen:

With reference to your letter of the 28th January, I am directed by the Board of Trade to state that for the present, the existing regulations regarding the import of goods of enemy origin remain in force.

Further, as will be observed from White paper Cd. 9194 and from the notice in the Board of Trade Journal of the 16th January, 1919 (page 66), it is proposed to prohibit the importation of all dyestuffs into this country for a period of ten years after the conclusion of peace.

In these circumstances it is at present not possible to consider your application to import the quantities of dyestuffs of German origin specified by you, and it is suggested that you should renew your application when the arrangements for administering the latter prohibition are complete.

I am, Gentlemen,

From this attitude of the British Board of Trade, which in effect is the active head of the British Licensing Commission, it can be clearly seen that Britain does not purpose to allow her dyestuff manufacturing industry to be interfered with in any extent by foreign competition—whether of enemy, neutral or ally origin. We further understand that very much the same precautions are being taken by France, and so far as Italy is concerned it is extremely difficult to obtain import licenses for American dyestuffs, although we believe that the Swiss and English goods are moving freely across the Italian border.

In view of all these circumstances, is it not self-evident that the United States ought, without delay, to take similar protective measures? As matters now stand, our markets are open, subject to the payment of what is only a mildly protective duty, to the products of all the world, without discrimination, whereas our own products are excluded from many of the world's most desirable markets.

We have discussed the proposed Licensing Commission in these columns so thoroughly that we believe all readers of the REPORTER must now be familiar with the essential features of the proposed legislation. To our way of thinking there is no argument against its adoption which in any way counterbalances the obvious benefits which would be derived. One of the largest domestic consumers, when asked recently by a representative of the REPORTER for his opinion as to the likelihood of the adoption of an American Licensing Board, said: "They'll never get it." When asked for his reason for this statement, he replied: "It's too good to be true." If there is no stronger argument for refusing to adopt this

legislation we feel that our legislators must be exceedingly lacking in common sense if they fail to pass the necessary enactments.

PRYING INTO PRICES

(*Continued from page 7.*)

these will be greater than they can survive. The more effective tariff which should be coming along sometime next summer, will be a slight aid, but the real solution to the problem, the most desirable specific for the elimination of the lethargy-producing germ, would appear to be the speedy enactment of legislation for the creation of a dye-licensing board. This would effectually take care of the price question and thereby stimulate trade.

For instance, let us assume for the moment that Hectic Scarlet NG (fast to washing, shaving, light, darkness and earthquakes) is an exceedingly useful and valuable dyestuff, and that the consumers of this country simply can't be happy without a hundred pounds of it each year. The International du This de Lighted Company, Inc., of New York, is making fifty pounds a year and getting $3.50 a pound. At the same time, Dundreary, Ltd., of Huddersfield, is making it and selling for $3.00 a pound. What happens? The licensing board buys fifty pounds from the New York concern at $3.50 and fifty pounds from the Huddersfield concern at $3.00, and sells the hundred pounds to American consumers at $3.50 a pound. But as soon as it becomes apparent that the facilities of the New York concern are such that they can make this dye for $3.00 per pound, the protection of the licensing board is withdrawn so far as this dyestuff is concerned, and the two companies can then fight it out on their respective merits. By the time the New York people were making a hundred pounds a year (remember, we are dealing in small figures for purposes of illustration only) it might well be that they could successfully compete in price with the English manufacturer.

The licensing board, then, would give the industry the slightly longer delay it needs in order to become firmly established, and in this way would benefit the consumers just as much in the long run, by assuring them a steady supply of needed colors at reasonable prices.

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DYE INDUSTRY NEEDS SAFEGUARDS

By William Smith Culbertson
Member United States Tariff Commission

No more interesting industrial development can be found than the growth of the American dye industry under the protection afforded by the isolation of Germany. The British blockade and other war conditions have permitted the American dye industry to develop from almost nothing to the position of an important industry. The production of coal-tar chemicals during 1917, exclusive of explosives and synthetic phenolic resins, was 54,550,107 pounds, valued at $68,790,856.

The Tariff Commission, whose investigations into the coal-tar industries have been under the able direction of Dr. Grinnell Jones, its chemical expert, has pointed out the stages through which the industry has passed. The first period was from August 4, 1914, to March 19, 1915. This covered the period from the beginning of the European war to the cessation of imports from Germany. While during this period the dependence of this country on Germany for dyes was brought forcefully to our attention, we were still able to obtain, through arrangements with the British Government, shipments of dyes from Germany, in return for which we paid in cargoes of cotton. The last direct shipment from Germany was received in this country on March 19, 1915.

The second period—that of famine—extended from this time to the passage by Congress of the dyestuffs law on September 8, 1916. During this period conditions became steadily worse, the textile mills endeavoring to economize in every way. The use of natural, as distinguished from artificial, dyes was revived. The unprecedented prices called forth supplies of dyes, particularly indigo, from such countries as China, Japan, Hong Kong, British India and Salvador. The submarine Deutschland arrived in July, 1916, bringing a cargo of dyes much needed in this country.

During this period American manufacturers began to meet the situation. The manufacture of intermediates began and American dye factories extended their productive capacity.

The third period extended from the passage of the dyestuffs tariff act until the United States entered the war on April 6, 1917. This period was characterized by a steadily increasing output of dyes both in quantity and variety. The tariff law accomplished its purpose in encouraging capital to invest in the industry, particularly in the textile industry, was relieved.

The fourth period extended from April 6, 1917, until the signing of the armistice. The demands of the army for khaki uniforms created a large demand for dyes suitable for this purpose and there was a corresponding decrease in civilian demands. A large portion of the American textile mills were engaged in Government contracts. Many raw materials essential to the produc-

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tion of dyes were taken over by other war industries thereby restricting the production of certain important dyes.

A new period in the development of this industry has come since the signing of the armistice, during which time there has been an effort on the part of the industry to adjust itself to normal conditions and to prepare itself to meet foreign competition.* All restrictions on the use of raw materials and of steel for plant construction have disappeared and prices on raw materials have been falling.

Situation in Britain

A similar development in the dye industry has taken place in Great Britain. It is there considered as an essential industry and definite steps have been taken to make the British consumer "independent of German dyestuffs."† This is being accomplished by means of loans and grants in aid of buildings, plants and research. The British Board of Trade states that it is not the object of this plan to assist financially the formation or development of any dye-making business in the interests of the business as such but that it is recognized that the development of the manufacture of dyes is desirable from a national standpoint.

Under the proposed plan no dyes are to be imported into Great Britain without special licenses. A trade and licensing committee are to determine what colors and intermediates shall be licensed for import and it is to be presumed that licenses will be refused in the case of all dyes which are being manufactured in Great Britain in quantities sufficient to supply the British consumer.

In the United States the tariff has thus far been the means adopted for developing and protecting the dye industry. The Tariff Commission has published a report suggesting amendments to the dyestuffs tariff act of 1916 which will make more effective the presumable intent of Congress.‡ It was not the purpose of the Tariff Commission in this report to advise whether or not the rates of duty in that law are adequate for the protection of the American dye industry. This is still an open question and involves a matter of policy which Congress will, no doubt, be called upon to consider.

When tariff matters come up for consideration in Congress no doubt the first industries to be considered are those

* United States Tariff Commission. "Census of Dyes and Coal-Tar Chemicals, 1917." † British Blue Book, Cd. 9194 (1918). ‡ United States Tariff Commission. "Dyes and Other Coal-Tar Chemicals."

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Nitric Acid
Muriatic Acid
Nitre Cake
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which are commonly referred to as essential or key industries. To these may be added certain industries which have been seriously disturbed by the war or which have sprung up for the first time in the United States since the outbreak of the war. Among the most important of the essential or key industries is the one producing intermediates and coal-tar dyes. It is closely related to the question of military preparedness and is also essential in the successful maintenance of the textile and other industries.

National policy would seem to require the protection of the coal-tar dye industry. In the first place it should be protected from such unfair practices as commercial bribery and full line forcing. When these unfair practices are carried on in the United States, the provisions against unfair methods of competition in the Federal Trade Commission Act are operative.

In all cases where the parties can be reached, the Federal Trade Commission has adequate powers for the protection of the American dye as well as other industries. These unfair practices, however, may be carried on by parties outside the jurisdiction of the United States and some further provision of law would be necessary. Section 802 of the Act of Congress of September 8, 1916, provided for the levying of a special duty in order to prevent the practice of full line forcing. It provided that if any article produced in a foreign country was imported into the United States under any agreement that any person in the United States should not use or purchase the article of any other person the duty ordinarily assessed on that article should be doubled.

Must Prevent Dumping

At the same time Congress enacted a law against unfair price cutting done with the intent of destroying, injuring or preventing the establishment of an industry in the United States. This provision against dumping is inadequate both as to substance and procedure. The law makes such a practice a criminal offense, and although this may be retained, some Federal Commission should be given power ta prevent dumping in the same manner that the Federal Trade Commission prevents unfair methods of competition within the country.

The law should also extend not merely to intentional cases of price cutting but to all those forms of dumping which result in the unfair injury to American industry. It makes no difference to an American manufacturer when he is injured whether it was done intentionally or not.

Finally, Congress will be called upon to consider whether the present rates of duty on intermediates and coal-tar dyes are properly adjusted and whether they are in amount sufficient to equalize the conditions of competition between this country and foreign competitors.—*Annual Chemical Supplement, Journal of Commerce.*

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MEDIAEVAL PIGMENTS

By Professor A. P. Laurie

At a meeting of the London Section of the Society of Dyers and Colourists, England, held toward the close of 1918 at the Leathersellers' College, the following paper, which in abstract form is herewith reproduced from the *Journal of the Society of Dyers and Colourists*, its official organ. The subject was viewed historically, rather than from the standpoint of chemical detail:

The early Egyptian pigments used for wall decorations and for painting on mummy cases were limited, being principally red and yellow ochre, white, black, Egyptian green and Egyptian blue, the two latter being peculiar to Egypt and very interesting. The blue was first discovered about 2000 B. C., but all trace of it was lost between the 2d and 7th centuries, its disappearance being associated with the Mohammedan invasion. It has been subject matter for research by many scientists, including Sir Humphry Davy and Dr. Russell. Prof. Laurie has himself prepared crystals of Egyptian blue, and finally determined the exact conditions for its preparation. There is only one very imperfect recipe, mentioned by Vitruvius, which has been handed down, viz., the heating together of copper or copper ore, sand, soda and lime in a furnace. The lecturer stated that the temperature must be kept within a range between 800 deg. and 900 deg. C. for about twenty hours when a double silicate of copper and calcium crystallizes out, which can be separated by grinding and washing the grit formed, giving the Egyptian blue. It is very remarkable that the Egyptians were able to do this. This was the blue of the Roman Empire, and it can only be prepared under such conditions. If the temperature reaches 900 deg. or higher, a green pigment is obtained which was used in Egypt at the same time, and is frequently found on their wall and mummy paintings.

The next blue of interest is the ultramarine blue prepared by grinding lapis-lazuli into a fine powder, mixing with oil and resin until a doughy mass is formed, and kneading under water made slightly alkaline, when the ultramarine separates out. A very imperfect ultramarine was used in the Byzantine days; it was not until the 12th century that it reached perfection.

Other Byzantine pigments were a purple made from the *Murex Branderis*, a species of shellfish, which was used for the Imperial robes, and malachite green, red lead and vermilion and orpiment.

In early Irish manuscripts (9th century) there is a purple prepared from *Purpura Capillus*, a shellfish found on the Irish coasts, badly prepared ultramarine, a special variety of orpiment,

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malachite green, and red lead, corresponding exactly to the Byzantine palette, and pointing to the probability that Greek monks first introduced Christianity into Ireland.

The examination of pigments on illuminated manuscripts and pictures is done as follows: The first difficulty is in obtaining a sample, especially in the case of illuminated manuscripts. The best procedure is to remove a small piece of pigment by the aid of a fine hypodermic needle, made sticky with a weak solution of Canada balsam. It is possible to remove a little of the pigment wtihout leaving any trace on the manuscript. High stereoscopic magnifying glasses should be used, ground flat and mounted with a central wire like a miniature cork borer. In the case of a section, a hypodermic needle is again used, and the pigment embedded in paraffin wax, and sections cut in the usual way.

The identification of pigments is comparatively easy from a chemical standpoint by applying tests which give a change of colour without dissolving the pigment. In the case of an oil picture, it is not necessary to remove the oil, as any chemical agent acts through the oil film.

Early Italian pictures are painted with egg, and the later ones with oil, as a medium. Egg pictures are traced up to the 15th century, succeeded by an intermediary period in which the most permanent pictures have been painted by Flemish artists Van Eyk, etc., who probably used egg and oil varnish mixed together with much better results.

A very beautiful transparent green pigment was used as early as the 8th century, which was later entirely lost sight of, but reappeared in the 15th century, when it was used by Flemish painters. The first recipe published is not found until the 17th century, by Dr. Mayerne. This green is a solution of verdigris in a pine balsam.

METHYL VIOLET POWDER & CRYSTALS

METHYL VIOLET BASE

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EQUAL TO PRE-WAR TYPE

Manufactured by

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A limited number of samples received for analysis, and working formulae furnished for their reproduction.

Confidental advice to chemists, superintendents and assistants, on matters pertaining to the industry.

Dr. Charles B. Davis
Care of American Dyestuff Reporter
470 Fourth Ave., N. Y. City

INQUIRY DEPARTMENT

All classes of chemical work or advice relating to artificial colors, natural dyestuffs, dyewoods, raw materials, extracts, intermediates, crudes, or dyeing chemicals and accessories in general, will be carried out for readers and subscribers of the AMERICAN DYESTUFF REPORTER by this department.

Inquiries of a minor character will be answered on this page, while major matters involving personal investigation, analyses, perfected processes and working formulas, will, if desired, be treated confidentially through the mails. All questions, materials for analysis or letters leading to the opening of negotiations for special work will receive prompt attention if addressed to Inquiry Department, American Dyestuff Reporter, 470 Fourth Avenue, New York City.

H. A. R.—Question—What is the basis of the formation of colored lakes on the fiber in calico printing?

Answer—This is the result of the mutual reaction between the fiber, mordant and dyestuff. The final result is a colloidal coloring matter, in which the colloidal alumina deposited in the fiber plays the most important part.

W. U. S.—Question—Can you inform us as to the composition of Ultramarine from a purely chemical standpoint?

Answer—It is regarded as a sodio-aluminic silicate, united either with a polysulphide of sodium or with a polysulphide and polythionate. It is usually expressed by the following formula:

$$2Na_2AL_2Si_2O_8Na_2S_2$$

C. S. M.—Question—Kindly inform us what acid or acids may be employed for the manufacture of condensation products of formaldehyde and primary amines, for use in the preparation of azo-dyes.

Answer—Dilute aqueous acids may be used such as sulphuric or hydrochloric. The temperature should be at the boiling point. When the bases are diazotized and developed on the fiber, red, claret, khaki and yellow shades are produced, which are fast to washing and acids.

FAIRBANKS & DORR BECOMES DORR WOOLEN COMPANY

An announcement has been issued informing the trade of the incorporation of a concern to be known as the Dorr Woolen Company, which will take the place of Fairbanks & Dorr, proprietors of the Granite State Mills and manufacturers of shirtings and dress goods. The new concern has for its president George A. Dorr, who conducted the business under the former name, and for its vice-president Roy L. Dorr. The corporation has acquired the plant and all the assets of Fairbanks & Dorr.

The factory operation and management will be, as formerly, under the direct supervision of George A. Dorr, while Roy L. Dorr will continue in his capacity of New York selling

FRED WETZEL & CO. N.Y.

R. Lechner Co., *Inc.*
Specialists in Dyestuffs, Dyewood Extracts, Etc.
200 Fifth Avenue New York

We urge that the Textile Industry support the stand of the American Dyestuff Reporter for an American Dyestuff Industry.

5120 TRADE-MARK

SIZINGS—FINISHINGS—SOFTENERS
SEYDEL MFG. CO.
Jersey City, N. J.

agent. The announcement further states that customers of the Dorr Woolen Company will receive the same service and personal attention that they received when the business was carried on under the name of Fairbanks & Dorr. The home office and factory of the corporation are located at Guild, N. H., while the New York office is at 43 Leonard Street, that city.

NOTES OF THE TRADE

The Southeastern Dyestuff Company, Atlanta, Ga., has been incorporated, with a capital of $25,000, to manufacture dyestuffs and kindred specialties. William A. Parsons is the principal incorporator.

After several years with the United States Finishing Company, and later with the St. Louis branch of the Lowell Bleachery, William D. McNair has resigned his post to become overseer of dyeing for the Bronx Company, New York City.

Bright direct cotton colors, ranging from lemon to red orange, rose, violet, browns, scarlets and blues, together with a series of colors developed from primuline, are shown in a new shade book recently issued by the Sterling Color Company, of New York City.

License to use seven dye patents which they claim are enemy-owned or controlled have been applied for by the Consolidated Color & Chemical Company, New York City. The Federal Trade Commission is considering the applications.

The Swiss hold that Germany has in the past practised illegal competition and undersold the home dye industry, and hence are preparing to close Swiss markets as much as possible against the Germans and in favor of dyes manufactured by the Allies.

Harrisons, Inc., the well-known subsidiary of E. I. du Pont de Nemours & Co., Inc., is constructing a 50 x 100 three-story addition to its chemical manufacturing plant at Thirty-fifth Street and Gray's Ferry Avenue, Philadelphia, to provide for increased capacity.

F. A. Reichard, Inc., New York, has been incorporated, with a capital of $100,000, to manufacture chemicals, colors and allied products. J. W. Bossert, A. P. De Marmon and G. Barritt, New York, are the incorporators.

The Mallinckrodt Chemical Works, New York, has recently completed negotiations for the purchase of the two five-story buildings at 15 Gold Street and 22-24 Platt Street.

Eimer & Amend, manufacturers of chemicals, have had plans made for alterations and improvements in their plant at Newark, N. J.

John D. Lawson & Co., Inc., New York, have been incorporated, with a capital of $40,000, to engage in the manufacture of chemicals, essential and vegetable oils, etc. The incorporators are L. S. Holmes and J. D. Lawson, 14 Cliff Street, and T. L. Green, 165 Broadway, that city.

The North American Dye Corporation, Mount Vernon, N. Y., is having plans prepared for alterations and improvements in its two-story brick plant to facilitate operations.

The net earnings of the Butterworth-Judson Corporation for the year ending December 31, 1918, after deducting taxes and depreciation charges, was $845,597, as against $1,468,683 for 1917.

FRED WETZEL & CO. N.Y.

AMERICAN MADE

DYESTUFFS and INTERMEDIATES

SOLE SELLING AGENTS FOR THE COLOR PRODUCTS OF

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MANUFACTURERS OF

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AND

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Dyestuffs, Colors, Intermediates, Sizing and Finishing Materials, Etc.

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Dyestuffs and Intermediates	*Produced by*	Central Dyestuff and Chemical Co. Newark, N. J.

BOSTON, 130 Oliver Street
PHILADELPHIA, 132 Chestnut St.
PROVIDENCE, 23 S. Main Street
ATLANTA, 1418 Empire Building
CHICAGO, 317 Clark Street
SAN FRANCISCO, 20-22 Natoma St.
CHARLOTTE, 210 South Tryon Street